

MAR 28 2008

Remarks

Applicants have amended Claims 1, 2, 4, 7 and 8. Applicants respectfully submit no new matter has been added by the present amendment. Support for the amendment can be found generally throughout the text, specifically at page 4, lines 15-20.

Claim Objection

Claims 7 and 8 stand objected to because of informalities. Applicants have amended Claims 7 and 8 to remove incorrect multiple dependencies and accordingly request withdrawal of this ground of objection.

Claims Rejections under 35 U.S.C. § 103(a)

Claims 1-3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kazas (WO 02/16452) in view of Gronowski (US 2001/0041780). Applicants respectfully traverse this ground of rejection and submit that the present claims are patentable in view of the cited document(s).

Applicants respectfully submit that "in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claims limitations. The teachings or suggestions to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicants' disclosure." See MPEP § 2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ 2d. 1438 (Fed. Cir. 1991).

Applicants submit the present invention is directed to a substantially gel-free compound comprising (a) at least one elastomeric polymer having an average molecular weight  $M_n$  of more than 20,000 g/mol comprising repeating units derived from at least one  $C_4$  to  $C_7$

CH-8451

-4-

isomonoolefin monomer, at least one multiolefin cross-linking agent and at least one chain transfer agent, said polymer containing less than 15 wt.% of solid matter insoluble in boiling cyclohexane under reflux for 60 min, said polymer not comprising a multiolefin monomer, a conjugated diene or a beta-pinene, (b) at least one filler and, (c) optionally at least one diluent.

Applicants submit Kaszas alone does not teach or suggest the claimed invention, nor does Kaszas, in view of Gronowski, teach or suggest the claimed invention. Kaszas discloses a butyl polymer having improved processability which is derived from a reaction mixture which contains a monoolefin monomer, a multiolefin monomer, a multiolefin crosslinking agent and a chain transfer agent. Gronowski discloses a butyl polymer comprising a monoolefin monomer and a multiolefin monomer.

The Office Action, however, fails to recognize the present invention explicitly excludes the addition of a multiolefin monomer in the reaction mixture. Based merely on this exclusion alone, the cited art fails to render the present invention obvious.

According to the Office Action, Kaszas does not teach that the elastomeric polymer has an average molecular weight of more than 20,000 g/mol; however, Gronowski does teach that the butyl rubber polymers have a weight average molecular weight greater than 400,000. The Office Action further states that at the time of the invention, a person of ordinary skill in the art would have found it obvious to use polymers with a molecular weight, as taught by Gronowski, in the composition, as taught by Kaszas, and would have been motivated to do so in order to ensure that the transition temperatures and the mechanical properties will be sufficient to give the polymer material useful commercial applications.

However, a point missed in the Office Action is that cited art discloses polymers with improved balance of cold flow, good filler dispersion, extrusion, extrusion rate and die swell while the present invention is directed to preparing polymers with good adhesion  
CH-8451

values. Applicants remind the Examiner that the proper standard clearly required by the Federal Circuit is that "both the suggestion and the expectation of success must be found in the prior art, not in the applicant's disclosure". The fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient to establish *prima facie* obviousness.

Further, Applicants do not understand the Examiners comparison of the Mw of greater than 400,000 g/mol for traditional butyl polymer taught by Gronowski and the claimed Mn of greater than 20,000 g/mol in the claimed invention. The Mw taught by Gronowski refers to a copolymer of isobutylene and isoprene synthesized in the absence of a chain transfer agent in the monomer feed whereas in the present invention there is no isoprene in the monomer feed and the polymer is based on isobutylene, divinyl benzene synthesized in the presence of a chain transfer agent. Accordingly, despite the assertion in the Office Action, the cited references do not teach all the claimed ingredients, rather they teach more than the claimed ingredients which would clearly impact the polymer properties.

Also, the Applicants draw the Examiners attention to the examples which compare traditional butyl polymers as disclosed in the cited art (i.e., contain isoprene) and those according to the present invention. As noted, compounds according to the claimed invention have a much higher adhesion to stainless steel.

Claims 4-6 also stand rejected under 35 USC 103(a) as being unpatentable over Kaszas in view of Gronowski and Greco (U.S. 4,524,187). Applicants incorporate their comments from above and further assert the cited art does not render the present invention obvious.

According to the Office Action, it would have been obvious to make the claimed products as taught by Greco out of the composition of Kaszas because the composition of Kaszas is well suited to the products.

CH-8451

-6-

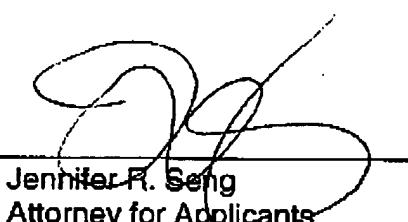
MAR 28 2008

As discussed above, Kaszas is not well suited for the applications of the claimed invention. Rather, Kaszas is directed to filled compounds having improved cold flow, filler dispersion, extrusion rate and die swell. Also, as discussed, Kaszas does not teach or suggest a compound according to the claimed invention.

Accordingly, for at least these reasons, Applicants submit the cited art fails to render the present invention obvious.

The USPTO is hereby authorized to charge any fees for an extension of time or those under 37 C.F.R. 1.16 or 1.17, which may be required by this paper, and/or to credit any overpayments to Deposit Account No. 50-2527.

Respectfully submitted,

By 

Jennifer R. Seng  
Attorney for Applicants  
Reg. No. 45,851

LANXESS CORPORATION  
Law & Intellectual Property Department  
111 RIDC Park West Drive  
Pittsburgh, Pennsylvania 15275-1112  
(412) 809-2233  
FACSIMILE PHONE NUMBER:  
(412) 809-1054

\sr\S:\Law Shared\SHARED\JRS\PATENTS\8451\ResponseAmendment 3 28 08.doc

CH-8451

-7-